PATENT COOPERATION TREATY **PCT**

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INTERNATIONAL PRELIMINARY REPORT ON PATEN (Chapter II of the Patent Cooperation Treaty)

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 12718PC2	FOR FURTHER ACTION See Form PCT/IPEA/416						
International application No. PCT/AU2005/000300	International filing date (day/n 2 March 2005	onth/year) Priority date (day/month/year) 2 March 2004					
C09D 127/06 (2006.01) C08L 1/1	8L 33/08 (2006.01) C09D 127/04 (2 4 (2006.01) C08L 33/12 (2006.01)	2006.01) C08L 1/10 (2006.01) C08L 33/10 (2006.01) C09D 127/08 (2006.01) C08L 27/04 (2006.01) 1) C09D 101/10 (2006.01) C09D 133/08 (2006.01) 1) C08L 33/02 (2006.01) C09D 101/14 (2006.01)					
Applicant POLY COAT PTY LTD et al							
 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. This REPORT consists of a total of 4 sheets, including this cover sheet. 							
3 This report is also accompanied by AN	NNEXES, comprising:						
 a. X (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows: sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). 							
4. This report contains indications relative and the rela							
Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity Box No. IV Proceeds state							
Box No. VI Certain docur Box No. VII Certain defect Box No. VIII Certain obser							
Date of submission of the demand 30 September 2005	. 07.3	of completion of this report une 2006					
Name and mailing address of the IPEA/AU	Autl	orized Officer					
AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUS E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929		THY DOUGLAS ephone No. (02) 6283 2664					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2005/000300

Box	No. I		asis of the	-			
1.	With				eport is based on:		
	X	The inter	national ap	oplication i	in the language in which it was filed		
		A transla translatio	tion of the	internation d for the p	nal application into , which is the language of a urposes of:		
		int	ternational	search (un	nder Rules 12.3(a) and 23.1 (b))		
					national application (under Rule 12.4(a))		
		in	ternational	l prelimina	ry examination (Rules 55.2(a) and/or 55.3(a))		
2.	furn	With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report): the international application as originally filed/furnished					
				, p.1.0			
	X	the desci	=	pages 1-33	3 as originally filed/furnished		
-					received by this Authority on with the letter of .		
<u> </u>			_	pages*	received by this Authority on with the letter of		
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-			. 1	pages	as originally filed/furnished		
			. 1	pages*	as amended (together with any statement) under Article 19		
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		a seque	nce listing	and/or any	y related table(s) - see Supplemental Box Relating to Sequence Listing.		
3.		The am	endments	have result	ted in the cancellation of:		
			the descr	iption, pag	ges		
			the claim	is, Nos.			
	1	同	the draw	ings, sheet	ts/figs		
		H	the seque	ence listing	g (specify):		
			any table	e(s) related	to the sequence listing (specify):		
4.		This re made, 70.2(c)	since they	een establis have been	shed as if (some of) the amendments annexed to this report and listed below had not been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule		
			the desc	ription, pag	ges		
			the clain	ns, Nos.			
		the drawings, sheets/figs					
		the sequence listing (specify):					
					d to the sequence listing (specify):		
*	:	If item 4 ap	pplies, some	or all of the	ose sheets may be marked "superseded."		

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2005/000300

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

1.	. Statement		
	Novelty (N)	Claims 1-22	YES
		Claims	NO
	Inventive step (IS)	Claims 15-17, 19-21	YES
		Claims 1-14, 18, 22	NO
	Industrial applicability (IA)	Claims 1-22	YES
		Claims	NO

2. Citations and explanations (Rule 70.7)

- D1 WO 2001/035719: page 6 lines 21-25, page 9 lines 6-30, page 12 line 32-page 14 line 13
- D2 Organic Coating Technology Vol 1: page 240
- D3 US 3953386: abstract, example 11
- D4 WO 2000/071359: page 25 line 28-page 26 line 15, examples 1 and 2, claims 1, 6 and 10
- D5 GB 2339785: abstract, page 10 line 12, page 13 line 15, page 25 lines 17-23
- D6 US 3959193: abstract, column 3 lines 15-25
- D7 US 4749564: column 2 lines 8-10, column 5 lines 22-29, column 3 line 23, example 2A, column 10 line 64-column 11 line 10
- D8 US 5412000: abstract, example
- D9 GB 1533652: page 2 lines 16-26, examples
- D10 US 4055698: column 3 lines 5-23, column 4 line 45
- D11 JP 61-111375: abstract
- D12 EP 1505129: abstract, example 1
- D13 US 5298552: abstract, Tables 1 and 2

NOVELTY (N) Claims 1-22

None of D1-D13 disclose a dispersion as claimed in claim 1 including an alkaline earth metal salt of a C9-C20 aliphatic fatty acid, therefore claims 1-22 are considered to fulfil the requirements of novelty. In addition, it is noted that none of these documents discloses a dispersion comprising a halogenated polyolefin as claimed in claims 15-17 and 19-20, or a coating method as claimed in claim 21.

INVENTIVE STEP (IS) Claims 1-14, 18, 22

D1 discloses a wood stain formulation comprising carboxy methyl cellulose butyrate acetate in water and an organic solvent. Butyl benzyl phthalate (page 13 line 19), surfactants (page 14 lines 1-8), acrylates (page 14 line 13) and pigments and extenders such as titanium dioxide and calcium carbonate (page 9 lines 6-29) are explicitly disclosed as additives to the formulation. D1 also discloses that other additives such as ketones, alcohols and silica may be added to the composition (see page 10 last two lines-page 11 lines 1-2, claim 6). Preparing the dispersion in a particular form, as recited by claims 6-11, is considered common general knowledge. Thus, D1 discloses all the features of claims 1-14, 18 and 22 other than an alkaline earth metal salt of a C9-C20 aliphatic fatty acid and a rust inhibitor (claims 5 and 8).

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2005/000300

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box No. V

However, the addition of a rust inhibitor is not considered to render claims 5 and 8 inventive as it would be an obvious addition to a composition for coating metals.

Further, D1 discloses that flatting agents are suitable coating additives (page 13 line 5). D2 discloses that metallic soaps (eg calcium stearate, an alkaline earth metal salt of a C9-C20 aliphatic fatty acid) are flatting agents. Thus, the obvious combination of D1 and D2 destroys the inventiveness of claims 1-4, 6, 7, 9-14, 18 and 22.

Therefore, claims 1-14, 18 and 22 are not considered to fulfil the requirements of inventive step.

As above, claims 15-17 and 19-20 are considered inventive as they refer to the presence in the composition of a halogenated polyolefin.

Claim 21 is also considered inventive as no obvious combination of any of D1-D13 suggests a coating method in which an adhesion promoter is used prior to coating with a primer having the composition as now claimed.

CLAIMS

- 1. A dispersion comprising a thermoplastic cellulose polymer or a derivative thereof, a phthalate ester of a C₁-C₆ alkylated aromatic alcohol, an alkaline earth metal salt of a C₉-C₂₀ aliphatic fatty acid, a surfactant and further comprising one or more components selected from the group consisting of:
- a metal carbonate
- a white metal oxide,
- a solvent,

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- a rust inhibitor, and
- 10 a lower alkyl methacrylate polymer.
 - 2. The dispersion of claim 1 comprising a lower alkyl methacrylate polymer.
 - 3. The dispersion of claim 2 wherein the lower alkyl methacrylate polymer is an ethyl methacrylate polymer.
 - 4. The dispersion of claim 1 comprising a metal carbonate, a white metal oxide, a
- 15 lower alkyl methacrylate polymer and a solvent.
 - 5. The dispersion of claim 1 comprising a metal carbonate, a white metal oxide, a lower alkyl methacrylate polymer, a solvent and a rust inhibitor.
 - 6. The dispersion of Claim 1 in a solid form.
 - 7. The dispersion of Claim 4 in a solid form.
- 20 8. The dispersion of Claim 5 in a solid form.
 - 9. The dispersion of Claim 6 in a granulated form.
 - 10. The dispersion of Claim 7 in a granulated form.
 - 11. The dispersion of Claim 8 in a granulated form.
 - 12. A primer comprising the dispersion of Claim 1 and a primer solvent.
- 25 13. The primer of claim 12 further comprising one or more components selected from the group consisting of: a C₁-C₆ ketone, a C₁-C₆ ester, a polymeric plasticizer and a halogenated polyolefin.
 - 14. The primer of claim 13 further comprising one or more components selected from the group consisting of: an alcohol, a polyhydroxy magnesium silicate derivate, and a silicon dioxide powder.
 - 15. A primer comprising a primer solvent, a lower alkyl methacrylate polymer, a C_1 - C_6 ketone, a C_1 - C_6 ester, a phthalate ester of a C_1 - C_6 alkylated aromatic alcohol, a polymeric plasticizer, a halogenated polyolefin and the dispersion of claim 4.
 - 16. The primer of claim 15 further comprising the dispersion of claim 5.

Amended Sheet IPEA/AU

- 17. The primer of claim 15 further comprising an alcohol, a thermoplastic cellulose polymer or a derivative thereof, a polyhydroxy magnesium silicate derivate and a silicon dioxide powder.
- 18. A method of manufacturing a primer including the steps of:

mixing a first primer solution comprising a primer solvent and a lower alkyl methacrylate polymer in a first vessel;

mixing a second primer solution comprising the dispersion of claim 6 in a second vessel;

mixing the first primer solution and the second primer solution together to form the primer.

19. A method of manufacturing a primer comprising:

mixing a first primer solution comprising a primer solvent and a lower alkyl methacrylate polymer;

mixing a second primer solution comprising a C₁-C₆ ketone, a C₁-C₆ ester, a phthalate ester of a C₁-C₆ alkylated aromatic alcohol, and the dispersion of claim 7; and

mixing the first primer solution and the second primer solution together with a primer solvent, a C_1 - C_6 ketone, C_1 - C_6 ester, a polymeric plasticizer and a halogenated polyolefin to form the primer.

- 20 20. The method of manufacturing a primer of claim 19 wherein the second primer solution comprises the dispersion of claim 8.
 - 21. A method for coating a surface of an article comprising:

coating the surface with an adhesion promoter comprising an aromatic hydrocarbon, a co-polymer of a C_2 - C_6 alkene and a vinyl ester and a chlorinated polyolefin; and

coating the surface with the primer of any one of claims 12-17.

22. An article coated with the primer of any one of claims 12-17.

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